

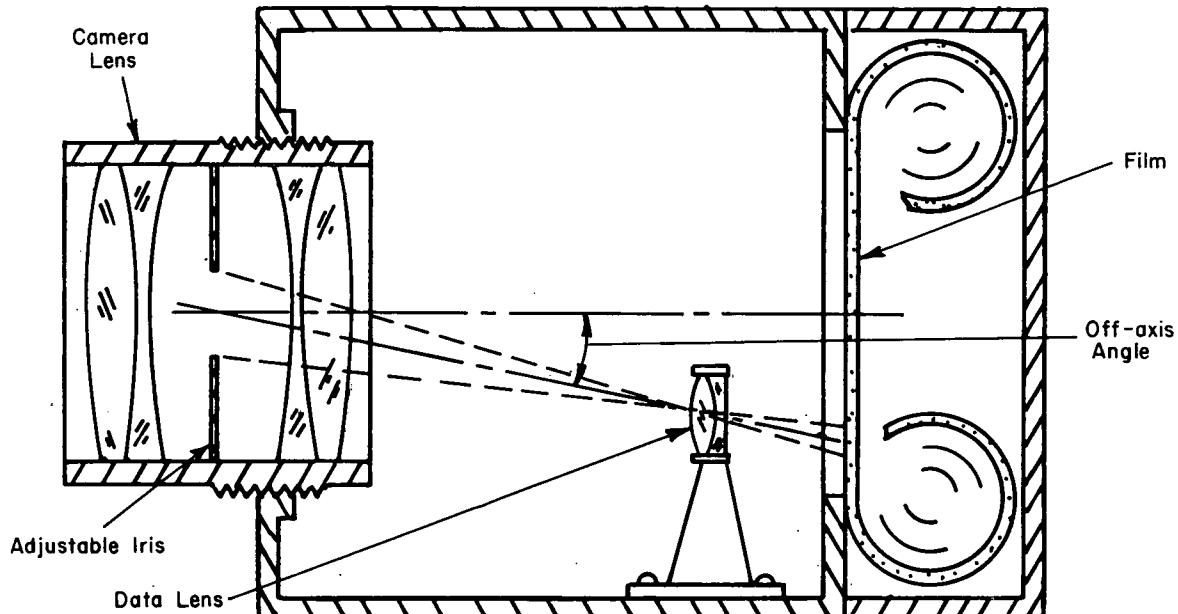
# NASA TECH BRIEF

## *Manned Spacecraft Center*



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### Modified Camera Records Lens Settings on Film



A representation of the camera lens aperture and focus setting can be recorded on the camera film simultaneously with the photographic image. This is accomplished by insertion of a small optical imaging system between the camera lens and the film. Previous recording methods were either manual or electro-mechanical, adding cost, weight and complexity to the camera.

The combined functioning of the camera lens and the added optical system produces an off-axis image of the camera lens iris diaphragm (aperture). The resultant image position varies with the lens focus setting; while

the image size is dependent upon both the lens aperture setting and the focus setting. Therefore, the aperture and focus settings of the camera lens can be determined by measuring both the location and the size of the data image.

Thus, the technique removes the burden of recording the lens aperture and focus settings from the photographer and, instead, provides a permanent record of these quantities on the film along with the related photograph. The required data imaging system is well within the state of the art for optical design, requires no elec-

(continued overleaf)

trical power, is low in weight, and adds nothing to the external size of the camera.

**Note:**

Requests for further information may be directed to:

Technology Utilization Officer  
Manned Spacecraft Center, Code JM7  
Houston, Texas 77058  
Reference: TSP71-10494

**Patent status:**

Inquiries about obtaining rights for the commercial use of this invention may be made to:

Patent Counsel  
Code AM  
NASA Manned Spacecraft Center  
Houston, Texas 77058

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